

# **SOLA® Xenon supply**

## **dc-constant current power supply for Xenon lamps**

The SOLA Xenon supply is a complete power source for Xenon short or long arc lamps and consists of a high voltage ignition device and a constant current d. c. supply to maintain regulated lamp power.

### **Principle of Operation**

A high voltage igniter is required to effect an initial break-down of the Xenon gas between the lamp electrodes. For a positive ignition, it is necessary to apply 5 to 10 pulses of 1 micro-second duration and of approximately 20 to 25 Kilovolts in amplitude during each half of the 50 or 60 cycle input line frequency.

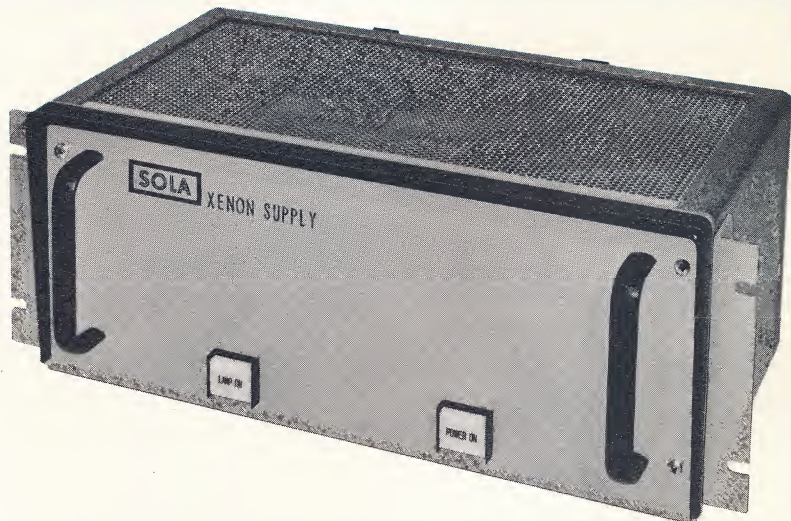
Once the Xenon lamp is ignited, a regulated current d.c. supply is required to maintain

lamp performance. Regulation of input voltage variations of  $\pm 15\%$  of nominal, is provided by the well known Sola constant voltage ferroresonant transformer. The Sola CV and its associated circuitry delivers constant current to the Xenon lamp during normal operation and exhibits its characteristic current limiting feature during any overload or short circuit condition in the lamp circuit.

For optimum lamp performance and minimum electrode erosion, a low ripple current value is essential. Although lamp manufacturers recommend 10% peak-to-peak maximum permissible current ripple pulsations, the Sola Xenon supply's ripple current pulsations are held to within 3% peak-to-peak.

### **features**

- Ripple held to 3%, peak to peak
- Remote or integral igniter
- Push-button operation
- Bench or Relay Rack mounting
- Constant Current Regulation



Push button switch activates high voltage igniter. After ignition, igniter disengages and then the supply automatically provides constant current for lamp. Bench mounts on its own feet or in a standard 19 in. relay rack.

See reverse side for specifications.



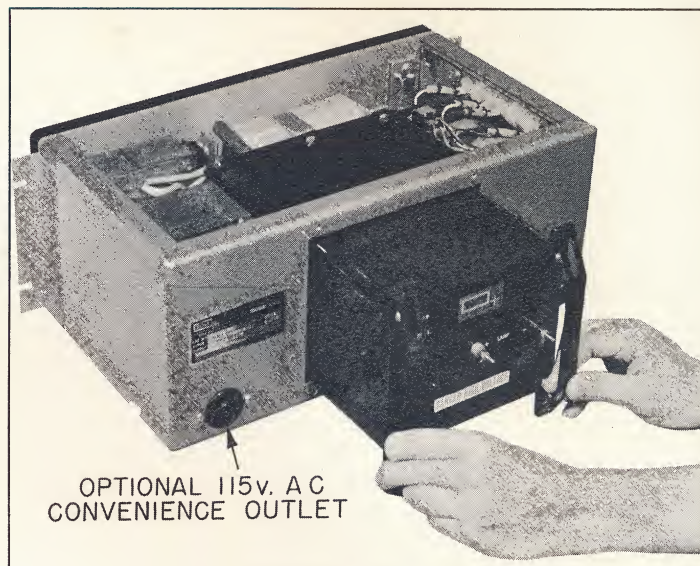
## mechanical characteristics

**Ignition:** After energizing the "power-on" pushbutton switch, lamp ignition is accomplished by actuating the "lamp-on" illuminated momentary action pushbutton switch. Successful ignition is indicated when push button remains illuminated. Both switches are located on the front panel of the supply.

**Remote Control Option:** For applications where the ignition device and lamp are to be mounted remotely, the SOLA Xenon supply permits easy removal of the igniter from the main supply. A low voltage plug-in type cable is available to connect the main supply to the remote igniter. Ignition control is located at the main supply, as if the igniter were integrally mounted in the supply case.

**Two Mounting Methods:** The SOLA Xenon supply may be mounted in a standard 19 inch relay rack with flanges provided or may be bench operated when placed on its mounting feet.

**Construction:** The SOLA Xenon supply is mounted in a standard sized, 7¼ inch high, 19 inch relay rack type chassis and rubber feet provided. Rack flanges may be removed when bench operated. Ventilation screen covers entire top area. Brushed aluminum panel with black anodized bezel and handles render handsome appearance. Chassis is baked enamel Sola Blue. Illuminated pushbutton switches are permanently engraved and conform to established human factors engineering principles. Six foot, three wire line cord and plug is provided. Optional 115v. AC convenience outlet is available on special order.



High voltage ignition device may be easily removed from main supply and located remotely with Xenon lamp. Remote cable and connector optional. Operator control remains at main supply.

## electrical characteristics

■ Input:	120 VAC $\pm$ 15%, 60 Hz	■ Efficiency:	75 to 80% at nominal input voltage.
■ Regulation:	$\pm$ 1% for line voltage variations within $\pm$ 15% of nominal input.	■ Temperature:	Operation: 0° to 40° C. Storage: -20° to 85° C.
■ Ripple:	Maximum of 3% peak-to-peak.	■ Short Circuit Protection:	Static current limiting at 250 to 300% of rated load.

## ordering information

catalog no. 67-10-115

dc-constant wattage (60 Hz)

WATTS	LAMP TYPES	OUTPUT		SIZE H X D X W	SHIPPING WEIGHT	PRICE EACH
		V @ A	KV			
150	CSX 150W XBO 150W/1 901C1	20 @ 7.5	20	7¼ X 10 X 19	68 lbs.	\$400.00

### accessories

PART NUMBER	DESCRIPTION	SHIPPING WEIGHT	PRICE EACH
999-103	Convenience outlet 115v. AC, polarized	1 lb.	\$ 5.00
999-104	Remote cable and connector for igniter, 15 ft., max.	4 lbs.	15.00

Sola Xenon supplies and accessories are available directly from factory, Elk Grove Village, Illinois 60007



1717 Busse Road, Elk Grove Village, Illinois 60007, (312) 439-2800  
In Canada: Sola Basic Products Ltd., 377 Evans Avenue, Toronto 18, Ontario

Also manufacturers of AC and DC Power Supplies • Sola® Constant Voltage Transformers • Solatron® Line Voltage Regulators • DC to AC Inverters • Lighting Ballasts.